

Brigham City corporation

Did you know? In 2010...

- Our wells produced 489,570,000 gallons
- Our springs produced 3,117,400,000 gallons
- We injected 445,675,000 gallons into our wells for our Aquifer Storage and Recovery program

OUR DRINKING WATER MEETS OR EXCEEDS FEDERAL AND STATE REQUIREMENTS.

If you have any questions about this report or concerning your water utility, please contact Tyler Pugsley at 435-734-6615. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. Brigham City Council meetings are held on the 1st, 3rd & 5th Thursdays of each month at 7:00 p.m. at 20 North Main Street where topics concerning matters related to Brigham City's water and water projects may be discussed. Public Utility Advisory Board Meeting will be held as needed.

**We are committed to ensuring
the quality of your water.**

All Sources are Groundwater Sources

Mantua Valley Wells	Intercity Wells	Springs
Mantua East Well	Cemetery #1	Rock Spring
Mantua West Well	Cemetery #2	East Halling
Peter Jensen Well	Intermountain Well #2	Peter Jensen Spring
	Cooley Well	Birch Spring
		Olsen Spring
		West Halling Spring
		Flat Bottom Spring

Water Sources



Flouridation & Chlorination

Brigham City injects fluoride into our culinary drinking water to augment dental care. The daily average of fluoride in the water for the year 2010 was 580 ppb (see definitions below). During the 2010 calendar year, the flouridation system was in operation 92% of the time. The 8% of non-operation was attributed to equipment maintenance.

Disinfection of our culinary water supply is by chlorination. Our yearly chlorine residual was 460 ppb (see definition on next page).

Chlorination helps control microbiological contaminants (*Total Coliform / Fecal Coliform*) which are monitored regularly throughout the Brigham City Culinary Water Distribution System.





Should I be Worried About Contaminants?

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, **including bottled water**, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Brigham City is responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.



In addition to the sampling results shown in the table on the following page, we have also sampled for 21 Volatile Organic Chemicals, 28 Pesticides, 35 Unregulated Organic Chemicals, and 10 Unregulated Pesticides. **None were detected.** For a list of these chemicals, please feel free to call the office anytime.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care providers about drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Table Definitions:

In the table to the right, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

- Non-Detects (ND)** - laboratory analysis indicates that the constituent is not present.
- ND/Low - High** - For water systems that have multiple sources of water, the Utah Division of Drinking Water has given water systems the option of listing the test results of the constituents in one table, instead of multiple tables. To accomplish this, the lowest and highest values detected in the multiple sources are recorded in the same space in the report table.
- Parts per million (ppm) or Milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- Parts per billion (ppb) or Micrograms per liter (ug/l)** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Parts per trillion (ppt) or Nanograms per liter (nanograms/l)** - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.
- Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Contaminant Level (MCL)** - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- Maximum Contaminant Level Goal (MCLG)** - The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- Date** - Because of required sampling time frames, i.e. yearly, 3 years, 4 years and 6 years, sampling dates may seem outdated.

Cross Connection...What it Means to You

There are many connections to our water distribution system. When connections are properly installed and maintained, the concerns are very minimal. However, unapproved and improper piping changes or connections can adversely affect not only the availability, but also the quality of the water. A cross connection may let polluted water or even chemicals mingle into the water supply system when not properly protected. This not only compromises the water quality but can also affect your health. So, what can you do? Do not make or allow improper connections at your homes. Even that unprotected garden hose lying in the puddle next to the driveway is a cross connection. The unprotected lawn sprinkler system after you have fertilized or sprayed is also a cross connection. When the cross connection is allowed to exist at your home, it will affect you and your family first. If you'd like to learn more about helping to protect the quality of our water, call us for further information about ways you can help.

Test Results

Contaminant	Violation Y/N	Level Detected ND/Low-High	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
Microbiological Contaminants							
Total Coliform Bacteria	N	ND	N/A	0	Presence of coliform bacteria in 5% of monthly samples	2010	Naturally present in the environment
Fecal coliform and <i>E.coli</i>	N	ND	N/A	0	If a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	2010	Human and animal fecal waste
Turbidity for Ground Water	N	0-1	NTU	N/A	5	2010	Soil runoff
Turbidity for Surface Water	N	0-11	NTU	N/A	0.5 in at least 95% of the samples and must never exceed 5.0	2010	Soil Runoff (highest single measurement & the lowest monthly percentage of samples meeting the turbidity limits)
Radioactive Contaminants							
Alpha emitters	N	1	pCi/1	0	15	2007	Erosion of natural deposits
Radium 228	N	0-1	pCi/1	0	5	2008	Erosion of natural deposits
Inorganic Contaminants							
Barium	N	51-60	ppb	2000	2000	2010	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	N	3-4	ppb	100	100	2010	Discharge from steel and pulp mills; erosion of natural deposits
Copper	N	128-283	ppt	1,300,000	AL=1,300,000	2010	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride	N	ND-500	ppb	4000	4000	2010	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead	N	1-2	ppt	0	AL=15,000	2010	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	N	500-1000	ppb	10000	10000	2010	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	N	600-2400	ppt	50,000	50,000	2010	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	N	8-17	ppm	None set by EPA		2010	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills.
Sulfate	N	10-16	ppm	1000	1000	2010	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
TDS (Total Dissolved solids)	N	234-325	ppm	2000	2000	2010	Erosion of natural deposits
Disinfection By-products							
TTHM [Total trihalomethanes]	N	ND-12	ppb	0	80	2010	By-product of drinking water disinfection
Haloacetic Acids	N	ND-1	ppb	0	60	2010	By-product of drinking water disinfection
Unregulated Contaminants							
Dichloromethane	N	ND-1.7	ppb		5	2010	

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.





Quality
On Tap!

We at Brigham City work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Our
Commitment
to You

Brigham City routinely monitors for constituents in our drinking water in accordance with the Federal and Utah State laws. The table on the previous page shows the results of our monitoring for the period of January 1st to December 31st, 2010. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but you can also save money by reducing your water bill. Here are a few suggestions.



Beautiful Brigham City-
Your Future is Here!

20 North Main
Brigham City, UT 84302
Office Hours: 8:00 am – 5:00 pm
Phone: 435-734-6615
Website: www.brighamcity.utah.gov



Take Advantage
of Online Bill Pay!

<https://www.xpressbillpay.com/>

Conservation measures you can use inside your home include:

- Check all faucets, pipes and toilets for leaks.
- Never use your toilet as an ashtray or wastebasket.
- Take shorter showers install water saving showerheads and ultra-low –flush toilets.
- Turn water off while brushing your teeth or shaving.
- Defrost frozen food in the refrigerator.
- Rinse vegetables in a full sink or pan of water.
- Fully load your dishwasher, rinse dishes in a full sink or pan of water.
- Only wash full loads of clothes.

Here are some ways that you can conserve outdoors as well:

- Equip all hoses with shut-off nozzles.
- Use a bucket instead of a hose to wash you car.
- Use drip irrigation systems and use shrubs and ground cover to reduce the amount of grass.
- Water your lawn or garden early in the morning or late in the evening.
- Set your mower blades one notch higher.
- Use a broom to clean sidewalks, driveways, etc
- Adjust sprinklers so that they don't water the sidewalk or street and don't water on rainy/windy days or over water landscaping.



Water Conservation